

2010 NAMA Toxicology Committee Report  
Summary from McIlvainea Volume 21, online at [www.namyco.org](http://www.namyco.org)  
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During 2010, 76 incidents of mushroom poisoning involving 93 people were reported through the NAMA website and/or through our nationwide team of toxicology identifiers. One previously ill elderly person's death was hastened by having consumed *Amanita phalloides*. Six other individuals survived poisoning by potentially deadly *Amanita* species (two cases involved *Amanita phalloides*, two cases involved *Amanita ocreata* and one case involved *Amanita bisporigera* or a look-alike). One possible amatoxin case involved a *Psilocybe* seeker who apparently consumed *Galerina* by mistake and may have suffered some liver damage. Another amatoxin case involved a small *Lepiota* species that looked a lot like *L. rubrotincta*. This case plus the reported death of a dog from *Lepiota subincarnata* (syn. *Lepiota josserandii*) should remind people once again not to eat small species in the genus *Lepiota*.

Of the 84 people not involved in confirmed or suspected amatoxin cases, 58 consumed known poisonous mushrooms or mushrooms where the identification was unknown and 26 consumed mushrooms that are edible to most people. The most serious of the non-amatoxin cases involved a woman who consumed an *Amanita smithiana*, after having been told that it was Matsutake. She suffered kidney problems but was successfully treated and did not require dialysis.

Consumption of raw mushrooms was the downfall of several people. Two consumed Morels raw, one consumed a raw *Leccinum*, another a raw *Russula* and one person ate a raw *Pleurotus*. Nearly all of the *Chlorophyllum* cases involved munching raw mushrooms. Even consuming raw *Chlorophyllum rachodes* or *C. brunneum* is likely to cause distress. *Chlorophyllum molybdites* poisoning is much worse if they are eaten raw – even though *C. molybdites* makes most people ill even if cooked. All mushrooms, even the sliced ones you see on salad bars, should be cooked before consumption. Mushroom cell walls are made of chitin which we cannot digest well without the aid of cooking. Many mushrooms also contain compounds that damage red blood cells (hemolysins) unless denatured by cooking. Because freezing only slows down but does not stop bacterial decay, mushrooms should be cooked prior to preserving in the freezer.

One person began to feel ill from drying Matsutake – it is important the mushroom dryers be operated in well ventilated areas because the spores given off in the process can cause problems for some people. There was also the first formal report I have received of someone having GI distress after eating Matsutake. For every edible mushroom, there appears to be some people who are sensitive and will get an upset stomach from eating it. Severe anaphylactic shock is rare, but there appears to be a case this past year involving *Laetiporus sulphureus* where the reaction was very severe. Several years ago there had been a death from shock after consumption of *Laetiporus conifericola*.

Consumption of hallucinogenic mushrooms can present serious problems when the altered state produces violent behavior and the police are called. A young man had taken hallucinogenic mushrooms and then sat down to watch "Alice in Wonderland." When pepper spray and control holds failed on the out-of-control subject, police repeatedly used a Taser. Even then it took seven Taser shots before the person collapsed and quit breathing. The young

man died, with the death attributed to *Psilocybe* mushrooms even though Tasers have caused numerous deaths, unlike *Psilocybe* mushrooms which do not cause fatalities.

A tragic outcome in 2006 was presented in a poster session at the North American Congress of Clinical Toxicologists conference in Denver, October 10/7/2010 (French LK, Burton BT, "Liberty and Death," Oregon Poison Center, Portland, OR, USA):

A healthy 20-year-old-male reportedly ingested as much as 4 g of hallucinogenic mushrooms one evening (typical single ingestion is 1/8 g) prior to entering a sleeping woman's apartment. Upon awakening she demanded he leave and a struggle ensued. Police were summoned to the home but the man became increasingly violent and failed to comply with their commands. He did not submit to multiple Taser discharges. Instead, he managed to pull out or break the wires and continue to struggle and attempted to grab the officer's pistol. After fleeing outdoors, additional attempts to subdue the man included nine beanbag rounds and additional Taser applications, all without effect. After attempted entry into a police vehicle containing a loaded rifle, the man was shot and killed.

In another case a very young man suffered long-term depression and 3 months memory loss after consuming what was almost undoubtedly *Amanita pantherina*. He also became violent and exhibited strength beyond his years.

One frequent user of hallucinogenic mushrooms contacted Marilyn Shaw about loss of muscular control, inability to focus, balance, or stand followed by extreme fatigue lasting up to three days. This has happened to him on several occasions after consuming *Psilocybe azurescens*. He reported that other individuals had observed a similar effect from *Psilocybe cyanescens* and other *Psilocybe* species that grow in association with wood chips and river estuaries. Marilyn contacted both Paul Stamets and Dr. Andrew Weil and confirmed that there appears to be a neurological problem associated with these wood-associated *Psilocybe* species.

A young man made a "medicinal" tea from the black knot fungus on cherry trees plus some *Daldinia concentrica* when he had been unable to find any Chaga. He suffered gastric distress for days. One of his ideas was that the GI distress was symptomatic of liver problems and milk thistle would protect his liver. However, milk thistle extracts are not absorbed in the GI tract (which is why injectable Silibinin is used the experimental protocol to treat patients who are suffering amatoxin poisoning from certain toxic *Amanita*, *Lepiota*, *Galerina* and *Conocybe* species). Tim Geho pointed out to him that at some doses Chaga has caused muscle paralysis and that he should be careful.

In addition to the reports involving humans, there were reports from 13 dog owners about dogs ill after the dogs ate mushrooms or were suspected of having eaten mushrooms. Four of the cases involved the death of the dog. Three of the dog deaths were due to amatoxins and in one case the mushroom involved was uncertain and death was so rapid that it might not have been a mushroom at all. There was also an inquiry from the owner of a goat herd wondering if several deaths in her herd might be attributed to mushrooms. However, the symptoms fit neither known mushroom toxins nor known toxic weeds. The only mushrooms the owner reported in her field were lots of puffballs.